Classifying epi study designs

Start of Block: Classifying epi article designs

instruct **INSTRUCTIONS**
Open the csv file containing the references https://osf.io/8uy9w/ **find the online version of the relevant article Skim over the article and its supplementary material to get familiar with its content (5 mins max) Answer the questions below**

article_id Article ID copy and paste in the article ID from the 'id' column in the csv file close the csv file

_____

title Copy and paste the article's title

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initials Your initials

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access Could you access:

	Yes (1)	Not present (2)	Present but not accessible (3)
Article (online version) (access_article)	☐	☐	☐
The article's supplementary material (access_supp)	☐	☐	☐

End of Block: Classifying epi article designs

Start of Block: Block 2

design What study designs do the authors state they used to analyse the UK Biobank data?
search article & relevant supplementary material for all these terms: 'case' | 'nested' | 'sectional' | 'cohort' | 'prevalence' | 'prospective' | 'retrospective' | 'control' | 'group' | 'comparis')
examine methods, results & relevant supplementary material **check all the designs** that the authors state they used to analyse the UK Biobank **alone** (they must use the exact terms in the options below)

☐ Cohort (includes: retrospecitive cohort study, prospective cohort study) (1)

☐ Cross-sectional (includes: prevalence study) (2)

☐ Case-control (includes: nested case-control, case-reference, case-comparison, case-crossover) (3)

☐ The authors did not state that they used a case-control, cross-sectional or cohort study design when describing one or more of their designs (4)

End of Block: Block 2

Start of Block: Block 3

Display This Question:

If What study designs do the authors state they used to analyse the UK Biobank data? search article... = Cohort (includes: retrospecitive cohort study, prospective cohort study)

Or What study designs do the authors state they used to analyse the UK Biobank data? search article... = Cross-sectional (includes: prevalence study)

Or What study designs do the authors state they used to analyse the UK Biobank data? search article... = Case-control (includes: nested case-control, case-reference, case-comparison, case-crossover)

design_ev Copy and paste in the authors statement(s) regarding their study designs.

End of Block: Block 3

Start of Block: Block 1

Display This Question:

If What study designs do the authors state they used to analyse the UK Biobank data? search article... = The authors did not state that they used a case-control, cross-sectional or cohort study design when describing one or more of their designs

box_1
Box 1 is copy and pasted from the STROBE elaboration & explanation article.

Box 1. Main study designs covered by STROBE

Cohort, case-control, and cross-sectional designs represent different approaches of investigating the occurrence of health-related events in a given population and time period. These studies may address many types of health-related events, including disease or disease remission, disability or complications, death or survival, and the occurrence of risk factors.
In cohort studies, the investigators follow people over time. They obtain information about people and their exposures at baseline, let time pass, and then assess the occurrence of outcomes. Investigators commonly make contrasts between individuals who are exposed and not exposed or among groups of individuals with different categories of exposure. Investigators may assess several different outcomes, and examine exposure and outcome variables at multiple points during follow-up. Closed cohorts (for example birth cohorts) enrol a defined number of participants at study onset and follow them from that time forward, often at set intervals up to a fixed end date. In open cohorts the study population is dynamic: people enter and leave the population at different points in time (for example inhabitants of a town). Open cohorts change due to deaths, births, and migration, but the composition of the population with regard to variables such as age and gender may remain approximately constant, especially over

a short period of time. In a closed cohort cumulative incidences (risks) and incidence rates can be estimated; when exposed and unexposed groups are compared, this leads to risk ratio or rate ratio estimates. Open cohorts estimate incidence rates and rate ratios.

In case-control studies, investigators compare exposures between people with a particular disease outcome (cases) and people without that outcome (controls). Investigators aim to collect cases and controls that are representative of an underlying cohort or a cross-section of a population. That population can be defined geographically, but also more loosely as the catchment area of health care facilities. The case sample may be 100% or a large fraction of available cases, while the control sample usually is only a small fraction of the people who do not have the pertinent outcome. Controls represent the cohort or population of people from which the cases arose. Investigators calculate the ratio of the odds of exposures to putative causes of the disease among cases and controls (see Box 7). Depending on the sampling strategy for cases and controls and the nature of the population studied, the odds ratio obtained in a case-control study is interpreted as the risk ratio, rate ratio or (prevalence) odds ratio [16,17]. The majority of published case-control studies sample open cohorts and so allow direct estimations of rate ratios.

In cross-sectional studies, investigators assess all individuals in a sample at the same point in time, often to examine the prevalence of exposures, risk factors or disease. Some cross-sectional studies are analytical and aim to quantify potential causal associations between exposures and disease. Such studies may be analysed like a cohort study by comparing disease prevalence between exposure groups. They may also be analysed like a case-control study by comparing the odds of exposure between groups with and without disease. A difficulty that can occur in any design but is particularly clear in cross-sectional studies is to establish that an exposure preceded the disease, although the time order of exposure and outcome may sometimes be clear. In a study in which the exposure variable is congenital or genetic, for example, we can be confident that the exposure preceded the disease, even if we are measuring both at the same time.

Display This Question:

If What study designs do the authors state they used to analyse the UK Biobank data? search article... = The authors did not state that they used a case-control, cross-sectional or cohort study design when describing one or more of their designs

X→ X→

design_judg

You reported that the authors did not state that they used a case-control, cross-sectional or cohort study design when describing one or more of their designs.

Please indicate which designs you **think** the authors used to analyse the UK Biobank based on

the definitions provided above in Box 1. (Check all that apply)

- ☐ Case-control (1)
- ☐ Cross-sectional (2)
- ☐ Cohort (3)
- ☐ Other (please specify) (4) _____

Display This Question:

If What study designs do the authors state they used to analyse the UK Biobank data? search article... = The authors did not state that they used a case-control, cross-sectional or cohort study design when describing one or more of their designs

design_judg_rat Please provide a rational for your response. You may copy and paste in evidence from the article to support your judgement.

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End of Block: Block 1

Start of Block: Block 4

comments Add any comments you have about this article here

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End of Block: Block 4